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EDITED BY
HENRY WARD BEECHER, Indianapolis,
EDWARD J. HOOPER, Cincinnati, Ohio.

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WESTERN FARMER AND GARDENER.

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## STIRRING THE SOIL.

Next to deep plowing we should urge the advantage of continually stirring the surface of the soil.

*It produces cleanliness.*—Weeds in a growing crop are witnesses which no good farmer can afford to have testifying against him. When seed is sown broad-cast weeding cannot be performed. In Europe, where labor is cheap and children plenty, akers of wheat and such-like crops are weeded by hand. *Our* only chance is, to clear out every field, to be sown broad-cast, by a thorough previous culture. In all crops which are drilled, or planted in rows, the hoe, or plow, or cultivator, should be kept in lively use through the season. This practice should begin early, that weeds and grass may not get a start, for often, if they do, it is nearly impossible to keep them down, especially if the season is a wet one.

But there are yet some important reasons for constantly stirring the soil among growing crops. No matter how thoroughly the earth was pulverized when the seed was put in, one or two rains will, except in very sandy loam, beat it down compactly. This crust is injurious in preventing the ingress of moisture. But that which is the most material of all, is, that *it excludes the air.* It is well known that the air affords much nourishment to vegetation; but, perhaps, it is not as well known, that it supplies it *by the root* as well as by the leaf. If any one wishes to try the experiment, and we have done it time and again, let two patches, in a garden, be treated in all respects alike, except in this;—let one be hoed or raked *every two or three days* and the other not atall, or but once in the season.

The result will satisfy any man better than a paper argument. Indeed, we have found it impossible (in the garden) to perfect some vegetables without constantly stirring the soil.

While these advantages are gained, it is not to be forgotten that, in dry seasons, a thorough pulverization of the surface, will prevent the evaporation of the moisture *in the earth* and prevent deleterious effects of drouth.

## PROF. LINDLEY ON BLIGHT IN PEAR TREES.

Those who have been interested in exploring the cause of the fire-blight in the pear tree will be interested to know that Prof. Lindley, the ablest botanical writer of England, and editor of the Gardeners' Chronicle, gives the same views of the dis-

ease as occurring in England, that we have in respect to it in the west. There, as here, it is misnamed. We call it fire-blight; the English call it *canker*. We extract from the Gardeners' Chronicle of May 9.

"Let us suppose a delicate plant, some tender variety of the pear, for instance, raised at Paris, cultivated there for many years, then brought for the English market, and suddenly distributed thro' the country gardens of England. Such a plant will be removed from a warm, dry, chalky soil, a hot summer, which renders the wood as hard as oak, and a steadily cold winter, which absolutely arrests all vegetation, to a cold damp clay or loam, half drained may be, a cool damp summer, and cloudy sky, which leave the wood as soft in autumn as at Paris it is at midsummer, and, to crown all, a fitful winter, mild and severe by turns, now bringing the sun of May in February, and replacing it by December nights in May.

"Under such circumstances what will happen to the Parisian pear? Its wood will be alternately frozen and thawed; its watery texture will render it peculiarly liable to damage in time of frost; parts will die or be so injured as to be unfit to carry on their offices when spring returns; and every shoot will contain dead points or *foci*, which, however, the eye fails to detect at the time. When growth returns, the naturally vigorous constitution of the pear tree makes a struggle to overcome the disasters of winter; new wood is deposited over the old internal sores, and all seems healthy. But the season is again unfavorable; the diseased *foci* cannot act as Nature meant them; watery and highly azotised sap collects in them, and runs into a state of incipient putrefaction; then the sore is established: out of sight, perhaps, but certainly established, and the seeds of canker are effectually sown.

"Liebig states it to be a law of matter that a body in the act of decomposition, and which he names the "exciter," added to a mixed fluid in which its constituents are contained, can reproduce itself in that fluid. And he refers to the well-known fact that the putrid matter of a decaying animal body laid upon the fresh wound of a living animal will bring on vomiting, debility, and even death, as happens to students in dissecting-rooms. In connection with his views on this subject that great chemist has the following striking passage, the bearing of which upon the case before us is of the first importance:—

"'In order to explain the effects of contagious matters, a peculiar principle of life has been ascribed to them—a life similar to that possessed by the germ of a seed, which enables it, under favorable conditions, to develop and multiply itself. It would be impossible to find a more correct figurative representation of these phenomena; it is one which is applicable to contagions as well as to ferment, to animal and vegetable substances in a state of fermentation, putrefaction or decay, and even to a piece of decaying wood, which, by mere contact with fresh wood, causes the latter to undergo gradually the same changes, and become decayed and mouldered.'

"We believe this to be so often the first cause of canker, that perhaps every symptom is but secondary. And it is quite conceivable that the most inveterate condition of this disease, even in a hereditary form, may be referable to the seeds of the *virus* of decay, distributed in all directions thro' the vegetable fabric.

"Supposing these views to be just, it is quite clear that the only courses which can be taken advantageously in order to secure ourselves against canker are two: the one not to plant such delicate varieties as no skill and care will ever reconcile to our climate; the other to compensate for an ungenial climate by scientific practice. We cannot make sunshine; we have no control over atmospheric temperature; rain will fall in spite of us; and it would be hopeless to struggle against a capricious winter, even if timber and glass were as cheap as brown paper. The evil must be arrested by other means.

"The reason why wood does not ripen in an English summer is that the light is insufficient to cause an adequate amount of perspiration from the leaves and branches, so that they become water-logged as it were. The cure for this is to give the roots less water, for then the leaves and branches will have less need of relief by evaporation. In order to get rid of the excess of water, mere drainage is not enough, although indispensable. It is desirable that the earth in which the fruit trees are growing should be so raised above the surrounding level as to be maintained continually in a warmer and drier state than the level itself; for then the heat absorbed from the sun will be radiated back into the air, and maintain the atmosphere of the trees in a milder and warmer condition than would be otherwise possible; and the main fact of thus raising the usual temperature around the leaves and branches, will assist in promoting their healthy evaporation, which results in ripeness if carried far enough."

This hits the nail upon the very head, and the right nail too. Words could not be selected which, in the main, better describe our frost-blight; and that it arises from the condition of the wood when subjected, in its unripe state, to the action of severe cold, we have constantly taught and still firmly believe. The remedy suggested by Prof. Lindley for garden pear trees, we have insisted upon for orchards, vis: dry growth and slow growth.

We confess that unexpected help from such a distinguished source in this matter of the blight, quite elates us.

After we had written thus far, upon recurring to the Chronicle again we found in its condensed correspondence another statement which shews that England is cursed with our frost-blight. Here are exactly the phenomena which occur with us.

"*Canker in Fruit Trees.*—That one of its causes is atmospheric influence I think the following fact tends to prove:—In 1843, I think, far on in May or in the beginning of June, after a period of unusually warm weather, and after a very warm day, when vegetation was rife, and the sap running in full vigor, there was a night of severe, I may almost say, for this country, intense frost; previous to this I had a young standard Ribstone Pippin in the most vigorous growth, and perfectly free from the slightest appearance of canker, or

any other defect, and the bark so smooth and healthy as to attract my particular observation the day preceeding the frost. A few days afterwards I observed the canker had assailed it in every part — upon the trunk and upon branches; upon the former in numerous blotches, more or less deep, and showing themselves as if seared and contracted by the application of a hot iron; whilst in numerous of the branches the injury had entirely encircled and killed them. The tree continues to live, but not recover, although this season it bears some evidences of improvement. All the other apple trees were affected in my garden, more or less, but as they had not previously attracted my particular attention, I can only say I had not previously noticed the canker in any of them, though it was speedily perceptible enough after the night in question. I will not trouble you with any theory or comments of mine; I merely state a fact which attracted my particular attention at the time of its occurrence.—*J. G. B., Exeter.*"

The views of Prof. Lindley upon the nature of the *virus* or fermenting poison, are exactly the suggestions of our correspondent *Tyro*, page 95, of the current volume of the Farmer and Gardener.

## COMMUNICATIONS.

### LETTERS OF A COSMOPOLITE---NO. 9.

Boston, Mass., May 16, 1846.

*Eds. Far. and Gard:* — There, sirs, I have seen the good and bad, the rich and poor sides of New England farming. Travelling through the Connecticut valley from Hartford to Hanover, takes one through the paradise of New England, and in justice to the valley, I set it down as an extremely fertile and highly cultivated tract, which renders a full return for all the skillful labor given to its tillage. But leaving Hanover, New Hampshire, and going down to Concord, gives the other side of the picture, and you may see what a stony, sterile country New England is. A vegetable garden here, looks to me much like a western gravel walk, and the pasture lots resemble stone quarries; the corn-fields I could not find, for corn is not yet up, and with some little skill in guessing, I gave it up; for where under heaven, earth and moisture for corn can be found, is a mystery to me as yet.

But there is a bright side to New England farming, from which we westerners ought to take a lesson. I noticed chiefly great and *skillful* economy by every device that a yankee brain can start to save a penny, or render useless things useful. This is evident in a thousand points. To use up old stumps, drawn out bodily, roots and all, they lay them roots to the road, and making secure and picturesque fences; to clear the fields of stone they chuck them together in long rows around the border, and call them stone fences; if a hill side has an inch of soil upon it, a "side-hill plow" cultivates it; if the grass and moss of a peculiarly barren stone-quarry won't keep a cow alive, it answers to keep a dozen sheep nibbling through half the year; if a swamp is too wet to be productive under cultivation, it yields muck for land less fortunate. There you see no rails lying round to rot and waste; no cornstalks in the feed yards; no cobs in the manger; the barns and houses are all in fine order, neat and commodious; and the wood-houses at this time (spring) are already filled up with sawed and split wood, seasoning in neat piles for the summer and winter consumption, a providence that I never saw in any western State. It would seem that a yankee farmer does not know what an *idle* moment means: rain or shine, cold or warm, he always finds useful and appropriate labor, which is sure to tell in his favor in the final result.

I could not help thinking, with some mortification to my western pride, how different the west would appear; how much richer her resources and rapid her growth, if New England industry could be allied to her exhaustless fertility! Compare, for instance, the crop of "sod corn," as raised upon the prairies of Illinois, with the *equal* produce of a field cultivated here with hard incessant labor. In the former, a yoke or two of oxen and a boy to drop seed, will in a week ensure a larger crop than the labor of five men, and horses to match, protracted through six or eight weeks, in the latter; in one case the labor is to plant and harvest; in the other the labor is in cultivation — hoeing, hoeing, hoeing!

Here, too, is to be seen, the triumphs of "*book-farming;*" systematic drains, which a civil engineer might be proud of; judicious manures, making the land produce what nature never knew she was capable of; select orchards elegantly pruned and cleaned; convenient barns; blooded stock, and cleanly, spacious dairies. The traveller sees in the road no live-stock to turn it into a cattle-yard, rendering it a path perilous to a pedestrian; no swine to run over, while in many places he is surprised to see high cultivation in fields totally without fences. There seems to be two ways of protecting a farm; one to enclose the fields and the other to fence in the cattle, and I would suggest to western farmers, whether it would not take fewer rails to do the latter than are now used to enclose their mile-square farms?

There is much, too, in the mind and habits— the genius of New Englandobvious to the stranger, which the resident never notices. Religion is still the core and centre of everything; topographical, secular, and political. Thus the guide-boards along the roads read, 'To Concord, M. H.' (meeting-house, vulgo, '*meetinus*',) that is, the centres from which distances are measured between villages is from church to church, instead of from court house to court house, as is the case in the west. There, too, town meetings are all held in the village meeting-house. Elections are carried on in the same nucleus of general interests. The village pound for estrays is often near the church, and the village tavern generally faces the 'meetinus,' and is kept by the deacon. The defference paid to the clergy and church dignitaries is often very amusing. Said I to a little fellow the other day, inquiring my road, "does Mr. H. live here?" pointing to his supposed residence. "No, *sir*." "Does he live near here?" "Don't know any such name." "Who does live in this house?" "*Deacon* H." The very man I wished to find; but the village boy never knew that Mr. and Deacon were compatible titles.

To one accustomed to the stir and change that is found in all western towns, even the smallest, the dull, quiet, regular routine of New England vil-

lages is absolutely insupportable; and this I take to be the reason why yankees who have once been waked up by a sojourn in the west, so rarely are contented to resume the life and habits of their native province. The fact is, every healthy, whole man needs and enjoys excitement, as much as a trout does the sparkling, rattling brook, and after once tasting the pleasure of it will as little go back to the monotony of quiet life, as would the aforesaid trout leave his mountain rills to dwell with the quiet and sedate cat-fish in smooth stagnant pools and ponds.

But for all this good that can be justly ascribed to those descendants of the Puritans, I am surprised at one thing in which they seem to be behind the west. I refer to *temperance*. Strange it may seem, but it is a fact, that I have seen more drinking men in New England than I ever saw before in the same space of time in the west. And yet, scarcely a village *allows* the sale of spirits, and it has occurred to me, that possibly the very secrecy and skill necessary to obtain drink, contrary to law, may lend a zest to indulgence, on the same principle that students always prefer to *hook* a melon, to receiving it as a gift. It strikes my attention more forcibly, because I had always known New England as the birth-place of all noble national reforms, and of course I looked to find in her an exemplification of the noble truths she has put forth to her sister states and the world. In education, intelligence, religion, and practical advancement and current progress, I have not been disappointed; but in morals I find a narrowness among the correct, and a depravity among the vicious that I had not looked for.

In short, although I profess no great philosophical or political acumen, yet it seems to me, that in the east and the west we have two extremes in morals and manners, neither of which are desirable as a whole, but both embracing excellencies which should be mutually transplanted. The west should import from New England *industry, education, experience in practical matters*, together with a large invoice of *religious principle*; while in return New England should transplant *pliancy, knowledge of men and things* (gained in the west by the heterogeneity of our population) *charity*, and *frankness!* T. K. B.

### THE LOON, BEAN SOUP, &c.

I give G. C. C. all the information, perhaps he will require on this subject. His bird, which I suppose is the same as that which he saw among my collections, is called a *Loon;* it is the *Colymbus glacialis*, of ornithologists. It inhabits our northern lakes; and migrates across the country to the Mississippi and other southern waters; fatigued by flying, it drops into any pond or stream, that may be beneath it, to rest and to eat; and it is on these occasions that this fowl is killed or caught in this and the adjoining States. I think it has mostly, but not always, been captured here in the spring: my notes show one shot here "4 mo. 2d, 1843;" another "4 mo. 14th, 1844," &c. The gizzard of one contained fragments of bivalve shells, and a deep grass-green juice; that of another spiral univalve shells, fish bones, gravel and green. It is an awkward walker, pitching, tumbling, tottering as if intoxicated; giving rise to the phrase: "as drunk as a loon."

A correspondent asks, p. 156, this vol., whether science will acknowledge that a straw or other rope passing from the top of a tree to a tub of water on the ground, will protect the tree from frost. I can conceive no other way in which it can act conservatively, than by its capillary powers distributing a warm vapor among the branches. It is not pretended that it does this; I have therefore no confidence in it. That the water should freeze in one vessel and not in the other, is easily explainable; either by supposing the vessels to have different conducting powers, for heat will pass more rapidly out of water in a sugar kettle, than out of that in a tub, and of course the water will freeze sooner in the metalic vessel; or by supposing the quantity of water to be less in the tub with the rope in it; for the greater the bulk of water, the more caloric there will be to part with, before the water will freeze. The same effect will be produced, if the quantity of water is the same in each vessel; but in one it is deep, and in the other, shallow; for in the latter case the amount of watery surface exposed, greatly expedites the escape of caloric.

A friend just now stepped into my office to enquire if we had made any bean soup according to M's directions: answering in the negative, he produced a saucerful of it. It was, however, not made entirely as directed, as *twice* the quantity of water was used, and the materials were boiled *several hours less* than ordered. But what he presented was the perfect *paste*, which some country apothecaries might label *unguentum porkis cum beanæ*, to be spread on a slice of bread and applied to the inside of the stomach, fasting. It was a very fair compound, and perhaps had seen its ninth day: it looked as if it would last nine months!

Perhaps for "four quarts of water" we should read four *gallons*. Will M. consult that little Yankee girl and have it duly corrected? My wife, a native of the Granite State, makes bean soup sometimes; and she says the water should not be allowed to boil away; but the original quantity as nearly as possible be preserved. With this amendment perhaps the receipt will pass the house. J. T. P.

### THE ARMY WORM.

I have often wondered why some more systematic notice has not been taken of this distructive insect. Here and there we see a mere memorandum made in our agricultural papers that the army-worm has been injurious and there the matter ends. No agricultural dictionary, no entomological work, no book or writing of any kind, which has fallen within my reach at least, beside what has just been mentioned, condescends even to name this larva. The reader, who may happen to be inexperienced in this matter, shall therefore have the benefit of what little I know, to begin with.

I have had no opportunity of late of ascertaining to what moth or butterfly this catterpillar belongs, as it has not, I believe, infested this district since 1826. Here, at Madison, and in some other parts of the State, whole fields of grass, wheat and corn were in that year literally destroyed. Some turned their hogs into their wheat-fields, to eat up the worms; and thus partially saved their wheat.

One of our earliest inhabitants told me, that the army-worm was known here as early as 1814; and I find an apparent allusion to this larva in the following expression from a volume of the "Friends' Miscellany:" the date is 1806; and I believe it has reference to the eastern part of Ohio or some neighboring district: "Some of the farmers are cutting their grass to secure it from the destroying worm." The grain is also said to have been injured by it. Both its incursion and its disappearance are sudden: like a vast army of liliputians they cover the field; and in a night, they are gone: having probably buried themselves in the earth to undergo their transformations.

J. T. P.

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REVIEW OF VOLUME ONE---NO. 9.

*Experiments on Pine Trees*, p. 202.—To these interesting experiments, and the editor's quotation from a foreign Review, may be added the well-authenticated fact, that some of the vineyards have for many years been manured with the prunings of the vines themselves; and by this means only, "barren fields" have been made luxuriant and fruitful. The separated branches are cut into small pieces and dug into the soil, as other manure is dug in: "at the end of four weeks," says Krebs, "not the smallest trace of them can be found." In this way, much of the mineral matter extracted from the soil, is returned to it, for the further use of the vine; but I suppose M's case cannot be thus explained; commercial "turpentine" (the oil) contains oxygen, hydrogen, and carbon, which, as constituents, the trees did not probably need; but combined, as in oil of turpentine, they may have acted as a *stimulant*. The improvement in his trees, may, however, have been solely a coincidence: I have a balsam-fir, which, until recently, had a "yellow, sickly appearance;" and I feared it would die; but I looked again, and behold, "in about eight day's time" my tree had assumed "a dark healthy green" and had almost literally "just begun to live." Had I, at this critical period, used either guano or turpentine, the credit of resuscitation might have been awarded to the article employed; but I did nothing. M's experiment is worthy of a repetition.

*Western Shepherd*, p. 204.—I read the reprint of this little work in the Farmer and Gardener with close attention; and marked for future use, the points wherein I thought I might be profited. But an observation on this page struck me as being directly at variance with what I had somewhere else impressively read; and a little research brought the other author again to light. I will here copy both authorities, where the contrast lies, for the reader's consideration, without being able to decide at present, how the two can be reconciled, if at all.

"The imperishable and almost indestructible quality of wool renders it a safe article to keep, to transport, and to deal in."—*Western Shepherd.*

"Wool is generally injured by keeping. It will probably increase a little in weight for a few months, especially if kept in a damp place; but after that, it will somewhat rapidly become lighter, until a very considerable loss will be sustained. This, however, is not the worst of the case; for, except very great care is taken, the moth will get into the bundles and injure and destroy the staple; and that which remains untouched by them [the moths, I suppose] will become considerably harsher and less pliable. If to this the loss of the interest of money be added, it will be seen that he seldom acts wisely who long hoards his wool, when he can obtain what approaches to a fair remunerating price for it."—*Farmers' Series in Library of Useful Knowledge.*

If the Western Shepherd is right, we shall have to attribute this English paragraph to a *manufacturer.*

*Pompone Peach*, p. 216.—Being wholly unacquainted, I turned to Downing, for further information: there I found the *Pavie De Pompone, agreeing* in having large flowers; *disagreeing* in being "very large, and rather coarse" instead of "middle-size" and "delicious;" and in being a clingstone, instead of a freestone; a late, instead of an early fruit. And this is the only pompone he acknowledges.

*Bed-bugs*, p. 224.—I never before knew that any anxiety had been felt for these invalids, who, it must be admitted, find their *lives to depend on keeping their beds;* but here we have a "sovereign *cure*" for them. I prefer killing them; but my good spouse will not allow them to come in my way.

*To boil Corn*, p. 234.—M's directions have been followed here by a number of cooks, with a far better result than some could believe. Let those who have not tried his mode of boiling, receive this as a recommendation of it, founded upon experience; and practice it at the forthcoming corn season.

*To mend Glass*, p. 234.—The reader need not put himself to the trouble to "melt a little isinglass in spirits of wine," until the constitution of things is altered; for isinglass is pure gelatine, which is altogether insoluble in alcohol.

*Fly Weevil* or *Angoumois Moth*, p. 292.—The writer must be mistaken in allowing but four legs to this moth; for entomologists permit nothing to pass for an insect that has not *six* legs: perhaps the "four" is a misprint. This moth derived its name from a province in France: it is the *Anacampcis cerealella* of entomologists: the two "short feelers or horns" are called *palpi*; and are common to all lepidopterans, (moths and butterflies,) though varying in size &c. In Angoumois its ravages were once alarming; and a committee appointed for the purpose ascertained that the insect could be destroyed in all its forms of larva, chrysalis and moth, by exposing the infected grain in an oven heated from 100° to 170° Fahr. for twelve or twenty-four hours. It appears probable that the same insect has appeared in Virginia, Connecticut and Maine, as well as in Indiana: Samuel Judah appears to have been the first to have publicly noticed it in this State.

*Will you send us*, (p. 308,) information respecting the keeping of the sweet potato during winter? I believe repeated experience has proved, that the most suitable material to preserve this root in is, *perfectly dry sand*. By filling barrels with potatoes and sand, and keeping them in a *dry* or even warm room, the roots can be preserved perfectly sound, till they are needed for sprouting; and throughout the winter they can be used on the ta-

ble. There appears to be moisture enough in the potato to preserve it plump and hard under such treatment; and *any* extraneous dampness tends to rot the tuber. The great secret appears to lie in using a *dry* material, and in *keeping* it dry. Charcoal might answer as well as sand; but it would not be so agreeable to handle. Does the foregoing accord with the experience of others?

*Small Grain on Bottom-land*, p. 309.—Fourteen akers of wheat, measuring thirty bushels to the aker; and weighing sixty-five lbs. to the bushel; raised on bottom-land! What will H. C. B. say to this? (See p. 125 of the current vol.) Good wheat, on alluvial land, is no new thing. When we urge the study of chemistry upon farmers, we must be careful not to blunder in presenting it in such a way as to fly in the face of facts, of which they are well assured; lest, thus *apparently* opposed to their experience, they reject it as an idle theme.

And now, a word with the editor, on this page, and we will have done. When Homer is found nodding, the vigilant critic is apt to be pleased. The proportion of ashes of all the small grains together, to the *weight* of their straw is about ten per cent.; but the quantity of ashes produced by the greatest bulk of stubble, even the *whole* straw of a field, would scarcely be sufficient to increase the cohesive quality of the soil perceptibly. The practice recommended is, however, very good, for the other purposes. The case cited, I thus explain: bottom-lands sometimes contain much peat: this, consumed with the stubble, would yield much ashes; these would give firmness to the burned portion of the field, while the stubble plowed into the other portion, would render the land mellow.

J. T. P.

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### WHEAT-FLY, AND SOME OTHER THINGS.

The errors of the age in which we live will not benefit the succeeding one, but the exposition of them may be the means of teaching those who follow our footsteps to avoid some of the things which lead to evil effects; of those errors that are most likely to be seen, perhaps none is more conspicuous than the egotistical manner in which some theorists and speculative farmers write about agriculture. Some of them speak of having made experiments in this branch, and some in another, when, perhaps the trial consisted of digging with a spade (and hands carefully encased in good buckskin gloves) some two feet square in the garden and scattering the seed thereon. Experiments of this kind must certainly fail as certain criterions to the value of any production as a field crop. And it is such experiments that have tended and that will tend to depress agricultual publications in which they are paraded with all the consequential airs of "a girl of sixteen." Not intending to censure the publication of properly conducted experiments, I would say, distinctly, that I am partial to them; but it's the *counterfeits* that so often are thus palmed upon us that deserve the rebuke.

But why is it that so few practical men contribute to the papers on agriculture? Because theorists have spoken so loudly, that the timid yeoman stands back somewhat considerably abashed. Will this always be the case? It is to be hoped not.

The culture of wheat has been somewhat uncertain for some years from the ravages of the Cecydomya destructor or other insect or insects no better than the veritable pest in its own person. The crop of Wayne township in this county, will be materially lessened by its depredations this season. The testimony of many who suppose the insect to be propagated in the seed has not yet had the effect of bringing all minds to that belief. Although Margarette Morris might convince by occular demonstration that she is a very loveable "Fräulein," yet it is not to be supposed that she *may* not have been under error either as to species or circumstance. And again; the remarks on small experiments in the relation to general culture, will apply to this particular one. Now permit a few "fixed facts" to be related by one who knows.

About the 1st week in the 6th month, 1844, part of one aker was in pasture, the remainder was cornstalks, the grass part of it being somewhat near four akers, was broken up, being well and deeply plowed; not long after, it was harrowed. Part of the stalks were also plowed, but a wet "spot" prevented the completion. In the latter part of the 7th mo., the whole of the stalk-ground was thoroughly plowed and dragged, making to a part of it a second plowing. Near the 15th of 8th mo., an attempt was made to cross-plow the sod-part of the aker, but from the partial decomposition of the sward, it was only extended to one "land." At this time the ground exhibited no indications different from usual. The first of ninth month the ground (of this sod-part) was neatly plowed and seeded with Wabash wheat (red-chaff, smooth) which was harrowed in. The whole surface of the field was full of small flies running over the clods under the loose earth, and flying about close to the ground. The wheat came up most beatifully and appeared to grow thriftily until the 1st of 10th mo., when, in a few days time the field was almost denuded, with the exception of the land which was cross-plowed in the 8th month, on which the wheat remained luxuriant. An examination showed the plant to be separated from the grain and root at or near the grain. The one land was also examined and showed the fly there also (in the pupa and chrysalis states) but the separation was not complete between the root and plant. The stalk-ground was sown about ten days or two weeks after the other, and the fly took the greater part of it. The part first sown in the one aker was re-sown in 10th month with bearded wheat, and the yield of the whole field was about 14½ bushels per aker. Still a little further in regard to this. Another field in clover pasture was broken up about the same time as the green sward above. The week following, the time the former was sown, this latter aker was also cross-plowed, sown and dragged in. The seed for all was taken from the same tile, and the yield on the latter (without resowing) was between twelve and a half and twenty bushels per aker. Judge the cause and circumstances who may. Another case:

In the summer of 1845, a field of clover and timothy, part of which had been mown and part retained the full crop was well plowed, leaving the green above the surface. It was done after harvest, say 1st of 8th mo. In three weeks it was thoroughly harrowed and the surface was covered

(as was stated in the former instance,) with small flies. During the fall their ravages were evident, though not to the extent of the former year. The return will be much diminished, perhaps a third, from what might be justly supposed it would yield. It was white chaff, bearded wheat. A potato patch in one corner of the field was sown the next day after the other, and from the same wheat "bunch," and it shows no mark of the insect. Let those who read, and think they understand, expound this book. A field of corn adjoining the field was sown two weeks prior with Wabash wheat, and does not appear to have been much injured.

A word on gapes in chickens, of which so many make their exit. A dozen hens were brought some years since from a neighbors and, for some three years, chickens grew not, like calves of the stall, but as chickens should, to be profitable. Every succeeding year the pip has beeen worse than in the preceding. A surgical operation will effect a cure. A what?—a surgical operation for a farmer, or a woman? Just so, Henry. Take spear or green grass; remove the seed, not the arms; insert into the chicken's windpipe; twist two or three times round and take out and the cause will be developed on the grass. On opening the mouth of the chick and looking close to the root of the tongue, the windpipe may be seen and sometimes the worm in it.

All of which is respectfully submitted.

*Richmond, Ia.*, 1846. THEODORE BOSWELL.

We have suppressed some sly hints in this article because, though they were amusing and quite good natured, they were too obviously personal.

All errors of reasoning and of statement and heresies pertaining to the farm and garden are open to the freest remark. But we do not like criticisms which point to *individuals;* still less if they are oblique hints; and less yet, when the author of them does not write over his own name. Whenever a correspondent wishes to remark upon individuals, he must do his work in a plain, open, direct manner, and sign his own name. If one is not willing to do this, it is not worth his while to do any thing about it.

Our correspondent is correct in censuring garden experiments, if it were true that a result obtained upon a small scale and under choice cultivation, were set forth as, in all respects, applicable to the farm.

It would be a great piece of indiscretion on the part of the experimenter, and not less on the part of those who read, to suppose that that would be, of course practicable on a large scale which had been successful on the small one.

Nevertheless, farmers should every year conduct experiments. They ought to make progress every year in knowledge and skill. An aker of ground, or a large garden, is just the place for judicious experiments. The risk and expense would be small, the attention could be easily directed to the matter in hand, the cultivation could be thorough, and every circumstance more easily conformed to the trial than if it were conducted upon ten akers.

The two special differences which are to be held in mind between garden crops and farm crops are, first, that garden soil, being deep, mellow and rich, will often give results which would not be gained upon a farm; and second, the culture adopted in a garden would be much more thorough than that of a farm. There are many crops which would succeed with us admirably, if they were very thoroughly tended, and not otherwise. It would be folly for a man who has not the time or strength, or careful habits necessary for such a course, to touch such crops;—or, if he had all the requisites, it would be folly, if the profits of the crop, when raised, were quite eaten up by the outlay.—*Ed.*

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### CHARCOAL.

In the fall of 1834 a shed was constructed, by setting sawed posts in the ground and boarding up the sides and covering with a board roof. One end has been used for storing charcoal, the other for other purposes. The posts were all alike exposed to the weather. On repairing it a few days since, the posts around which the charcoal had become packed, were all found to be sound, and I noticed among them oak, walnut and cherry. The residue, mostly oak, were all rotted off at the ground.

Some years ago my vines were badly infested with the yellow-bug. Early in the morning, while the plants were wet with dew, I put fine charcoal on them, and covered the ground around them, and they received but little further injury. Some days ago I found the bugs busy on my squash vines—some hills nearly destroyed. I treated them as before, and they have received but little further injury, although the bugs were plenty for some days after. At the same time some melon vines near by appeared just to have attracted their attention and their visits, but as yet had received no injury. They were well covered as the others, and have escaped their depredations.

Ten years ago, a ridge of fine charcoal, the base perhaps three feet wide, and twelve or fifteen inches high on the centre, was laid across a public street for a foot-walk. For several years the ridge remained unbroken, the heaviest loaded wagons would rise from the deep mud on either side, and pass over it without cutting through, and to the present time it is a dry crossing at almost all seasons.

### PRESERVING MEAT.

My father's practice from my earliest recollection was, to pack his smoked meat for summer use in flax-seed chaff. He had a large tight box, with a lid to fit close, standing in an open upper room, in which he placed his hams, &c. in the spring, as soon as they were smoked, with the chaff around them so that the pieces would not touch each other, with a covering on top of several inches. I never knew his hams to mold, or to be injured by flies or insects of any kind.

### BEE HOUSE.

In the fall of 1836 I placed a hive of bees in a house four feet square, made by nailing boards jointed and groved, to a square frame of joist, at top and bottom, with a double board roof, which, when first made, was very tight, admitting but little light or air, but the sun soon warped the roof, which made openings which partially admitted both. The house was set on the ground, and the earth filled in, and packed solid even with the top of the lower frame or sills, for a floor. A piece of board six inches wide was fastened on the south side, inside of the house, on the back side of which the front edge of the hive was placed, the back part resting on a board placed across the house edgewise, thus leaving the bottom of the hive entirely open, and two feet above the ground or floor. Several half-inch holes were made through the side of the house just above the flat board for the bees to pass through.

The bees constructed some comb on the outside of the hive while the house remained dark, but ceased after some light was admitted. The first season they built their breeding comb from the bottom of the hive down nearly to the ground, alternate portions of which have annually been taken away, which the bees have regularly replaced. Excellent honey has been taken two or three times a year from the upper part of the hive.

The bees have never swarmed, have continued healthy and industrious, but have not increased in number after the second year; the old appearing to die annually as fast as the young increase. The millers have been plenty around them, and worms may be found on the ground under the hive during summer, and no pains have been taken to destroy them, or protect the bees from their ravages. They do not appear to have effected any lodgement inside of the hive, which I attribute to the hive's remaining open at bottom, thus enabling the bees to dislodge them.

### INQUIRIES.

Can any readers of the "Farmer" give any information in relation to charcoal roads? I have heard of experiments having been made in various places—and have seen some flattering accounts of their success—which, if correct, it may be of some advantage to the community to have more light on the subject. Also, I should be glad to see a description of plank roads, now in use in some parts of the country, their cost of construction, and claims to consideration. A dissertation on the best manner of constructing and repairing our common roads, adapted to our soil and circumstances, I should also like to see in the "Farmer and Gardener."

What has become of the Indiana Horticultural Society? W. S. J.

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SPRING VALLEY FARM, near Green Castle,
May 27, 1846.

It was my wish to *advertise* in your paper, but as you do not admit advertisements, I wish you to remind your readers in such way as best suits your own taste, that I have sown ten akers of the Alabama or Hackleman wheat; it now looks very fine, and promises, at least, thirty bushels to the aker, and will be fit for the sickle by the 15th of June; soon after which it will be offered for sale for *seed only, it being pure and clean*, at $1,00 per bushel.

I have also for sale ten full blood bucks coming three years old, bred from a selection made from the justly celebrated flock of our friend Geo. Flower, Esq. of Albion, Ill. The rich grasses of Putnam County have improved the size, added weight to the fleece, and the fineness of wool has not deteriorated. Samuel Lawrence, Esq., of the Middlesex Manufacturing Company of Lowell, paid me forty cents for my last year's clip.

A. H. NICHOLS.

## SELECTIONS.

### HAY MAKING.

Why not adopt the same rule in regard to the time of cutting clover and grass for hay, that is followed in cutting medicinal herbs? The object in both cases is to secure the intrinsic virtues of the plant. In curing herbs, as all acquainted with the subject admit, the most proper time for cutting is when they are in full bloom: and it is also admitted that they should be cured in the shade, because if exposed to the more direct influence of the sun and air, some of their valuable properties would be evaporated.

We know there is some difference of opinion in relation to the proper time for cutting grass. The advocates for ripe hay contend that there is more "substance" in it, and that it will "go further" in feeding stock, than that which is cut while it is in blossom. And so we suppose there is still more "substance" in scrub-oak brush, and that it would go still farther in feeding (not *supporting*) stock. Admitting there is more substance in ripe grass, is it a kind of substance which affords more nourishment to animals?

Plants, at the time of flowering, contain starch, gum, and sugar; all of which are known to nourish animals. In the formation of seed, the stems and leaves are exhausted of these substances, and the substance which remains is chiefly woody fibre. But it may be said that the composition of woody fibre, starch, and gum, are nearly the same. Admitted, but this does not prove that animals are able to extract nearly an equal amount of nourishment from each. The composition of the diamond, the hardest of all substances, may be said to be similar to that of starch, gum, &c.,—carbon being the chief element of all; but the digestive organs of animals would hardly be able to convert the diamond into organized tissue. And though woody fibre, if eaten by cattle or sheep, might "stick by the ribs," we think the ribs would not acquire from it much fat, or the system much strength.

In some parts of the country, animals are actually *fattened* for market on hay alone. This may sound strange to those who feed their stock only with clover and timothy which has gone to seed; for we presume their stock was never thus fattened. But where this object is attained, the grass is cut while it is quite green, (not past bloom,) and made and preserved with great care. It is true there are some kinds of grasses,—as the "spire grass," or "Kentucky blue grass," (*poa pratensis*) which make but little bulk in seed stalks, the chief growth consisting of leaves which spring from the

root. The greatest value in fodder would be obtained in such cases by allowing the crop to grow till it had acquired its greatest bulk. This remark however by no means applies to clover or timothy, or the grasses usually cultivated for hay.

In making hay, we would expose it to the sun and air no more than is required to effect its preservation, for the same reason that is above given in reference to curing herbs. Clover can be cured —indeed it is more conveniently cured—with but very little exposure to the sun. If it is not wet, and is fairly wilted, it may be put with forks, into cocks, which will weigh, when dry, about fifty pounds each, and will effectually cure. Timothy, also, may be cured in the same manner. The finer grasses, when thrown into a body, pack more closely, and afford less space for air; consequently they require to be more thinly spread in making.

Exceping with clover, which we never spread out of swath, our practice has been to spread out the swaths as evenly as possible, if the burden is stout, as soon as the dew is off; in the afternoon, rake and cock it before the dew falls. We prefer it in cocks, even if it is no more than wilted, because the sweating it will undergo in the course of twelve hours, will much facilitate the making, and if the grass is coarse and hard, it will render it much more soft. Besides, hay that has been well sweated in cock, is not liable to ferment in the stock or mow.

Whether the hay which was mowed and put in cocks on the first day will make so that it will do to go to the barn on the second day, depends of course on its condition, and the state of the weather. If all appearances indicate that the hay can be made sufficiently on the second day, (and repeated observations only can determine the degree of dryness which is required,) open the cocks and shake the hay out lightly, thoroughly breaking all the locks with the fork. But it should not lie spread out later than three or four o'clock in the afternoon, but should be put up again, or if dry enough, put in the barn this time, lest it contract moisture. If from the condition of the hay or the appearance of the weather, there is a probability that the hay cannot be made enough in one day, let it remain undisturbed till the weather is favorble.

There are one or two other considerations in favor of early cutting which we omitted to notice above. It is admitted by physiologists that plants exhaust both their own energies and the soil, more in forming seed, than in the whole preceding portion of their growth. Thus when grass is suffered to ripen, it gives but little after-growth, and from the exhaustion mentioned, the sward more quickly dies out.—*Albany Cultivator.*

## GARDEN MEMORANDA.

*Glycine sinensis* is now in flower in the spacious conservatory at Syston Park, the residence of Sir J. C. Thorold. It has more than 5000 bunches of flowers on it; each bunch, or raceme, being from nine to twelve inches in length, and composed of from fifty to sixty flowers. It was planted about nineteen years ago, the roots having the full range of the border. The plant is coiled many times round one of the columns to the height of twelve feet, where it divides into numerous branches, which are thickly studded with lateral flowering spurs. The main branches are so arranged as to cover an area of 6800 square feet, and are suspended in festoons at various heights from one foot to ten feet from the glass roof. The pendent racemes of delicate purple and lilac flowers, hanging over the dark-green foliage of Camellias and other plants, present a striking display of floral beauty not often to be met with, while the delicious fragrance which it diffuses through the rooms attached to the conservatory renders it a most desirable climber for such a situation. The main stem, at twelve inches above the ground, measures thirty-six inches in circumference. This noble climber will no doubt again be, as it has always hitherto been, a mass of beauty in July and August.—*J. S.—Lon. Gard. Chron.*

*Destruction of Insects.*—The following is the result of some experiments which I have made this year with gas-water, as applicable to the destruction or removal of many of the noxious animals with which our gardens are, and have been, so unfortunately infested for many months past. I have tried it of various strengths, but I have reason to think that unless diluted in six times the quantity of pure water, it cannot be applied without injury to vegetation. At this strength it appears to be almost instantaneously destructive to snails, slugs, and earwigs, and drives away every species of worm, including that most destructive species known by the name of the rook-worm. Ants will not remain where it has been used, but they only retire just beyond the influence of the effluvia. It may be objected that the smell is abominable, but this passes off quickly, while the effect under-ground remains; as I have had the soil turned up several days after the gas-water had been applied, and found the smell nearly as strong as at first. I am not as yet aware what influence the water may have upon fruit, if touched by it (as, for instance, the strawberry,) after it is set.—*London Gard. Chron.*

Yellow Peony.—A more remarkable acquisition than the yellow Pæony, not a small straw-colored species, which is only a spoiled white, but a true yellow-flowered plant, does not often occur. All that we know for certain of its history is, that it was received in October, 1842, in the Garden of the Horticultural Society, from Mr. N. de Hartwiss, the directer of the Nikita Garden in the Crimea; that it is just mentioned in the "London Journal of Botany," for April, 1842, p. 207, by Dr. Fischer, of St. Petersburgh, who, in a letter to Sir William Hooker, makes the following statement:—"Mr. Hartwiss has received many interesting plants from Abcharia, sent by Count M. Worontzoff. Among them he has found a yellow-flowered Pæony, Epimedium pinnatum (confined hitherto to Talysch alone,) and Pinus Nordmanniana (an Abies,) said to be a showy and beautiful tree." We understand that 25 guineas was demanded for a single plant of it in one of the great continental nurseries. The species has much the appearance of Pæonia Cretica, is quite hardy, grows where any other Pæony will grow, and flowers in May. At present we believe that the plant in the Garden of the Horticultural Society is unique in this country.—*Botonical Register.*

## CANKER ON FRUIT TREES.

A correspondent writes to us thus:—"In a beautiful wall-garden, in the west of Caernarvonshire, the CANKER is very severe among the standard Apple and Pear trees, and the gardener says he cannot prune them or put the knife to them in any way, as the spurs and sometimes the whole limb die away; and it is certainly the case in many instances which I saw myself. However, the same does not apply to the *trained* trees on any aspect, whether they are stone fruit or Apples and Pears, and they are always regularly pruned as usual. The situation of the garden is about two miles from the sea, and is rather exposed to the south-west winds. The soil is a sandy clay with a yellow sandy subsoil. The dying of the spurs and limbs the gardener thinks is attributable to the effect of the sea-breeze on the wound; but I think that *that* would apply equally to the wall-fruit. If anybody among your correspondents could suggest a remedy for the horrid canker with which the garden abounds, and give a hint how to act with regard to the pruning, they would greatly oblige by their kindness.—*Cerniwaidd.*"

They would greatly oblige us also, and, we may add, every person in Europe who has a garden. But how can this inquiry be answered in a reasonable manner until the *cause of canker* is agreed upon? We have turned over every book in our library, we have read everything that has been said about it; we have been asking all our garden acquaintance for a quarter of a century; we have ourselves examined cankers of all sorts, from the little brown speck which appears on the surface of a young twig to the great dry sore which eats through a limb 20 years old; the scalpel, the scraper, the saw, the pruning knife, and Mr. FORSYTH's composition have been enlisted; even the microscope has been made to do its work, and the result is almost nothing. We do not know *with certainty* what is the cause.

Plenty of prescriptions are to be found, which, like HOLLOWAY's ointment, are applicable to all sorts of cases; there is no lack of learned explanations and dogmatical opinions; but as to sagacious reasoning, or sound philosophical induction—there is no such thing.

Use any plaister, said the learned and royal gardener of Kensington. Scrape away all the dead wood, go down to the quick and cauterise with oil of vitriol, says M. DUBREUIL. M. DUHAMEL tells us to cut to the quick, to cover the wound with cow-dung, and to bind all up with straw or matting held fast with withse. Throw away your cankered trees and raise seedlings, was the doctrine of Mr. KNIGHT. Bring up the roots to the surface, said Mr. REID, a sensible writer on gardening, in the "Memoirs of the Caledonian Horticultural Society."

But no confidence can be placed in these or any other so-called remedies, unless they can be shown to have some direct bearing on the cause of the disease. In the absence of that proof, they are merely empirical. The great point, then, here, as in all similar instances, is to determine what it is that produces canker. Let us see what authors say as to that matter.

Mr. KNIGHT referred it to old age, and conceived that it was constitutional debility. DUHAMEL called it a corrosive ulcer, and classes it among diseases which proceed "from dryness, or wetness, or the quality of soil," not a very precise account of it, we must confess. DE CANDOLLE does not mention it. DUBREUIL the younger says that nobody knows; that it often follows hail, or is otherwise the result of contusions, and that a sunstroke may cause it. Mr. REID refers it to the coldness of soil. Mr. PEARSON, of Bewdley, is clear that it is caused by atmospheric influences. It is the insects says one; it is constitutional cries a second; it is all the fault of the sea, says another; while a third assigns it to late and extensive pruning in the spring.

Nothing can well mark more distinctly what an utter confusion of ideas there is respecting this, which is a disease of the utmost consequence to the gardener, as it is sufficiently shown by our correspondent's letter, at the head of these remarks. Out of such a farrago what is to be gathered?

The first points on which attention is to be fixed are the well ascertained facts connected with canker, about which no question exists. They are not many. 1. We know that some varieties of fruit canker in this country, more or less, under all circumstances; such are the Golden Pippin, Hawthornden, Royal Russet, Api petit Apples; the White Beurre, St. Germain, and the Windsor Pears. 2. We know that in others canker is never observed; as, for example, in the Wild Apple and Pear, or the varieties called Dumelow's Seedling, Northern Greening, Wormsley Pippin, Blenheim Pippin, Waltham Abbey Seedling, and Dutch Mignonne Apples; and the Glout Morceau, Beurre Diel, Seckel, Aston Town, Marie Louise, Ne Plus Meuris, Althorp Crassane, and Knight's Monarch Pears. 3. We know that although inveterately cankering varieties may become healthy for a time, they invariably show symptoms of the disease sooner or later. How common, for instance, is it for Apples in the nurseries, grafted on strong healthy stocks, to lose all sign of canker until they have been growing for a few years in a garden. 4. We know that if a tree is once seriously cankered, all the appliances that ingenuity has suggested fail to eradicate it, though it may no doubt be diminished. 5. We know that in cold, wet, undrained soils, or cold climates, the symptoms of disease are aggravated; and that in warm well drained land, and a mild climate, they are mitigated. And these are, perhaps, the only facts about which we are quite certain.

Do they render it probable that local applications, cutting, and scarifying, and cauterising, and plaistering, are the true cures for the evil? Surely not. The five great facts above mentioned conclusively show that whatever the primal cause of canker may be, it is a constitutional malady which is always liable to appear in certain varieties, and generally will appear under peculiar and well ascertained circumstances. To cut a plant to pieces, in such a case, is like mangling a poor creature afflicted with cancer or any other scrofulous affection. If the evil is eradicated in one place, it presently breaks out in another. The constitution of the plant is what must be looked to, and nothing else. It may, however, not only be constitutional, but hereditary; and in such cases is incurable, as it often is.

Or it may be a constitutional affection caused

by exposure to unfavorable climates, as when the tender Apples of the United States, born and reared beneath a broiling sun, are transferred to our chilly, cloudy, pleasant England. Such cases are also incurable, unless summer warmth can be artificially secured.

Or it may be a temporary disease induced by local causes as when an Apple-tree with an hereditary disorder, or constitutional tendency to canker, is placed artificially in a place absolutely unfavorable to the very nature of the species. In such a case to remove the obvious cause is to put an end to the mischief.

This we take is the case of our correspondent *Cerniwaidd*. His wall borders are warm, raised, and probably well drained; there he has no canker. But in the central quarters the sandy subsoil is possibly a standing pool, for want of drainage, and cold, wet, and "sour," for want of access to air. His case appears to be the same as that mentioned in the "Theory of Horticulture," p. 110, where it was found by observation that the summer temperture at 3 feet below the surface was only 44 deg. instead of 68 deg., as it should have been. Means were taken to confine the roots near the surface, and the canker disappeared.

We have been led to dwell more upon this matter than is often possible, in answer to the inquiries of our correspondents, because it is a striking illustration of the importance of looking to principles and not to prescriptions.—*Gar. Chron.*

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*Maize Cookery.*—None of the recipes published in this country give an idea of the excellent way in which maize flour, or polenta, is used in Italy. The only fault of the Italian method is that one eats too much, as I am ashamed to say has been my case at the Hotel de la Couronne, at Brides, near Moutiers. The landlord is renowned for his culinary skill, but could he only make, or had he never made any other dish than *timballe de polenta à la savoyarde*, that alone should render him immortal. Take polenta, perfectly dry and fresh, moistened with boiling water, and perfectly mixed by stirring with a wooden spoon until the mass is reduced to a thoroughly smooth paste, of consistence to permit boiling. Keep it just below a boiling temperature until, by tasting, you find it to be perfectly homogeneous; about ten minutes suffice: stir the whole time. Remove it from the fire and add much fresh butter, strong brown gravy, grated Parmesan cheese, and as much garlic as suits your palate; grated ham is an excellent adjunct. Simmer ten minutes, stirring the whole time; pour or turn the mass into a well-buttered mould; serve with brown gravy. If you publish this, you will merit a statue in the new Houses of Parliament, for I defy the world to produce its equal as a farinaceous dish. 'Twould make a skeleton corpulent.—*Polenta gnocchi* are also capital. Stir in hot water and simmer till of a consistence which just allows it to run from the pan. Pour the mass on a board, and when cold cut it into diamonds of an inch square. The thickness of the paste should not exceed three-eighths, or half an inch. Put the squares close to each other in a dish, but they should not touch. Pile layer above layer, a little butter and grated cheese between each; or, if you wish to eat it as a sweet or pudding, pounded cinnamon, sugar, or treacle. The butter, cheese, or sugar, prevent the bits and layers sticking to each other. Brown the whole by fire above and below, or bake in an oven, or steam until the cheese be softened, or the butter and sugar incorporated in the paste. The said Gnocchi, made with common flour, are equally good. It is the Roman popular dish, and no osteria's sign-board ever wants Gnocchi famosi inscribed upon it. It is so general and common, that it forms the proverb invariably, and should you officiously seek to interfere in the property belonging to another, or remonstrate on its abuse, *Ognun può far della suo pasta gnocchi*. Every one is at liberty to make gnocchi of his own paste, i. e., any body may do what he likes with his own.—*Gard. Chron.*

Our readers will understand that that "maize flour" and "polenta" are, in our vernacular, Indian meal or corn meal.—*Ed.*

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### HEALING WOUNDS ON TREES

We can scarcely go through an orchard without seeing more or less wounded trees—trees having the bark removed from some cause, and the wound becoming black and cankery. Or there have been large limbs removed and nothing put upon the stump to absorb the overflowing sap, and heal the wound. This is in part the effect of carelessness and inattention, and in part of ignorance. For the benefit of the latter, we publish *Forsyth's Recipe* for a composition which long experience has proved to be an excellent application. This composition was invented by John Forsyth, as long ago as 1791, when he had charge of the Royal Gardens, at Kensington. It was deemed so valuable that a large reward was given him by the King, on his making it public.—*Maine Farmer.*

"Take one bushel of fresh cow-dung, half a bushel of lime-rubbish of old buildings, (old plastering of rooms is preferable,) half a bushel of wood ashes, and a sixteenth part of a bushel of pit or river sand; the three last articles are to be sifted fine before they are mixed; then work them well together with a spade, and afterwards with a wooden beater, until the stuff is very smooth, like fine plaster used for the ceilings of rooms.

The composition being thus made, care must be taken to prepare the tree properly for its application, by cutting away all the dead and injured parts, till you come to the fresh, sound wood, leaving the surface of the wood very smooth, and rounding off the edges of the bark with a drawknife, or other sharp instrument; then lay on the plaster about one-eighth of an inch thick, all over the part where the wood or bark has been so cut away, finishing off the edges as thin as possible; then take a quantity of dry-wood ashes, and mix with it a sixth of the same quantity of the ashes of burnt bones: put it into a tin box, with holes in the top, and shake the powder on the surface of the plaster, till the whole is covered over with it, letting it remain for half an hour, to absorb the moisture; then apply more powder, rubbing it on gently with the hand, and repeating the application of the powder till the whole plaster becomes a smooth, dry surface.

If any of the composition be left for a future occasion, it should be kept in a tub, or other vessel,

and urine of any kind poured on it, so as to cover the surface; otherwise the atmosphere will greatly hurt the efficacy of the composition.

Where lime rubbish of old buildings cannot be conveniently got, take pounded chalk, or common lime, after having been slacked a month at least.

As the growth of the tree will gradually affect the plaster, by raising up its edges near the bark, care should be taken, where that happens, to rub it over with the finger, which is best done when moistened by rain, that the plaster may be kept whole, to prevent the air and wet from penetrating into the wound.

To the foregoing directions for making and applying the composition, it is necessary to add the following:

As the best way of using the composition is in a liquid state, it should be reduced to the consistence of thick paint, by mixing it up with a sufficient quantity of urine and soap-suds, and laid on with a painter's brush. The powder of wood ashes and burnt bones is to be applied as before directed, patting it down with the hand.

When trees have become hollow, you must scoop out all the rotton, loose, and dead parts of the trunk till you come to the solid wood, leaving the suface smooth; then cover the hollow, and every part where the canker has been cut out, or branches lopped off, with the composition; and as the edges grow, take care not to let the new wood come in contact with the dead, part of which it may sometimes be necessary to leave; but cut out the old dead wood as the new advances, keeping a hollow between them, to allow the new wood room to exted itself, and thereby fill up the cavity, which it will do in time, so as to make, as it were a new tree. If the cavity be large, you may cut away as much at one operation as will be sufficient for three years. But in this you are to be guided by the size of the wound, and other circumstances. When the new wood, advancing from both sides of the wound, has almost met, cut off the bark from both of the edges, that the solid wood may join, which, if properly managed, it will do, leaving only a slight seam in the bark. If the tree be very much decayed, do not cut away all the dead wood at once, as it might weaken the tree so much as to endanger its being blown down. It will, therefore, be necessary to leave part of the dead wood at first, to strengthen the tree, and to cut it out by degrees as the new wood is formed. If there be any canker or gum oozing, the infected parts must be pared off, or cut out with a proper instrument. When the stem is very much decayed, and hollow, it will be necessary to open the ground and examine the roots.

The first time that I tried the composition in a liquid form, was upon an elm which had been planted about twenty years. It had been very much bruised by the roller, had several cavities in it, and was very much bark-bound besides. Having prepared the wounds, and applied the composition with a painter's brush, I took my knife and scarified the tree in four places; I also shaved off with a draw-knife, all the cankery outer bark, and covered the whole of the scars with the composition, shaking the powder of ashes and burnt bones all over it. A very heavy rain began in the evening and continued all night; yet, to my great surprise, in the morning, I found that only some of the powder, which had not had time to dry and incorporate with the composition, had washed off. I now repeated the powder, and, without anything more being done to the tree, the wounds healed up, and the bark was restored so completely, that three years ago it could hardly be discerned where the wounds had been. Some of the wounds were thirteen inches long, eight broad, and three deep.

Since the time it was scarified, the tree has increased ten inches more in circumference than a healthy tree near it, which was planted at the same time."

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### ENGLISH AND AMERICAN PLOWING.

Mr. Coleman's notice of English Plowing has attracted some considerable attention in this country, and called forth remarks both for and against our Plowing as compared with foreign:

"I attended, among several others, a plowing match at Saffron Walden, where there were at least ten competitors, with lots of an eighth of an acre; and, as well as I can remember, the furrow slices were to be seven inches in width and five inches in depth. It was not a match against time, although the work was required to be completed within a certain time. I do not misstate when I say I do not believe there was the variation of an inch, in the whole field, in the width or depth of the furrow, or a single crooked line, or even a balk. The fields or lands were struck out before beginning. Two horses composed a team, and the plowman was his own driver. Some boys under eighteen were allowed to enter as competitors for boys' premiums. I went over the field in an ecstacy of admiration at its uniformity, neatness exactness, and beauty."

"There are two points, which have seemed to me always particularly to test the skill of a plowman. The one is the mode in which he lays out his land, and strikes the first furrow; and the second, that in which he finishes his last furrow. In the case to which I have referred, the last land remained, at the close, a single unbroken strip of equal width, from one end of the field to the other, lying like a stretched out ribbon, which, as the plowman came down the course, he turned without breaking, and with precision, from one end to the other. In this instance, the horses seemed almost as well trained as the driver, and inspired with equal emulation. The finishing of the ends of the lands is always a work of great care; they are cross-plowed, and the whole affair is completed with an equal neatness throughout.

I have seen very good plowing in the United States, and perhaps in no department of agriculture has greater improvement taken place than in plowing, and in the construcion of plow.—Formerly, nothing could be more slovenly executed. A straight line was not to be seen. The land was not half turned over. The furrows were of such depth and thickness as they might chance to be; and the plough itself, when in action, resembled very much a live animal, with a sort of grasshopper motion, which one man at the stilts, and often two men riding upon the beam, were struggling to keep down, and, like police officers, to prevent an escape. A man was always required, likewise, with a hoe, to assist in turning the furrow-slice at the end of the share, or in the discouraging duty of raising again, and turning over

by main force, those furrow-slices which, notwithstanding they had been raised by the plow, like a reluctant boy pulled out of bed in the morning, with his eyes half open, insist upon getting back again as soon as the master's back is turned. I remember many a thump on the breast from the handles of the plow, and many a sudden jerk, which has thrown me upon the furrow, when I have been riding on the beam, and many a spliting of a beam, and a breaking of a share; and have looked back in dismay upon a long furrow-slice absolutely turning back into the furrow, after I had supposed it securely laid over. Somewhat of this experience may have been necessary, to enable me to estimate properly the excellence of English plowing, when the implement seemed to move through the ground with as much quietness, directness, ease,—I may almost add grace,—as a boat through the water, with its sails spread to a favoring breeze, and an accomplished steersman at the helm. Some allowance is made for the condition of our fields, compared with the English fields. Here there are no stumps of trees, to impede or derange the plow. With us, alas! in many cases, the stumps and stones remain in resolute opposition, to dispute our entrance, and, like bad tenants, can be dispossessed only by main force.

"I know that some may ask, What is the use of doing things with so much care? I answer, in particular, that, the field being more thoroughly worked, the advantages to the crop, both in the suppression of weeds and in furnishing a more favorable bed for the extension of the roots of the plants, and its after cultivation and management, are quite sufficient to recommend it. But I answer, in general, that the labor in the end is less, and more easy, in doing things well and regularly than in half doing them, and that in a slovenly manner; and that the habits of order, neatness, and regularity, in one branch of labor, lead to the same habits in other branches, and are of eminent advantage; and, according to an excellent proverb, a thing which is well done is twice done."

Mr. Botts, in the April No. of the *Southern Planter*, says: "It is very probable that, as a general rule, the English Farmer gives more attention to appearances than we do, but in all the essentials of good plowing we doubt whether some of the work done upon our James River plantations is excelled any where. If Mr. C. had seen, as we have, a large four-horse Davis plow whirling the dirt over to the depth of ten or twelve inches, completely subverting the earth, and hiding weeds as tall as the plowman's breast, we are inclined to think he would have witnessed the exhibition of a higher degree of the plowing art than any he has seen in England, or than any that the nature of the country could afford. We can tell Mr. Colman a secret that will surprise him and many of his countrymen—there are thousands and thousands of acres in Virginia so deeply and thoroughly cultivated that the largest and best Northern plows are looked upon as mere toys and play-things. There is no subject on which more erroneous opinions prevail at the North than as to the character of Virginia culture."

This story of 'Virginia' plowing, by Mr. Botts, is decidedly tough. The twelve inches depth we can easily manage; but how those weeds "*breast high*," say four feet, are 'hid' we cannot so well understand. We admit that our opinions "as to the character of Virginia Agriculture" were quite erroneous, if this is a specimen.—Ed. Farm. & Gard.

Mr. Allen, editor of the *American Agriculturist*, next, gives us an account of plowing which he lately saw on the farm of Mr. E. Woolsey, near New York: "Mr. Pate, the manager, is a Scotchman, and having several Scotch plowmen, with Scotch plows at work, to gratify our curiosity he invited us to see them operate. The work was not done for show, but was such as characterizes the every day operations of good plowmen in Scotland, and if all were not as well done at home, they would be dismissed by their employer for awkward workmanship. The field in which we found the men at work was about 40 rods long, of a rich loamy soil, and coated with a tough old sward. Here the men set in and run their furrows from end to end, as straight as one could draw a line, turning them 6 inches deep, and 11 inches wide, slightly lapped, and packing them up, one after the other, all day long, with a single pair of horses, each plowman driving his own team, and not varying throughout their work, as we could discover, a single inch in the thickness or width of their furrow-slices. We have seen as good plowing in great Britain, but never anything like it before, as a whole, in the United States, though we have often been present at the most celebrated plowing matches. There were no snake trails, or ram's horns here, or half turned sods, or untouched ground, or skipped places, but the whole was as thoroughly and evenly done as it would be possible to accomplish with the most careful spading, and when harrowed with the fine double harrow, the surface of the field had the appearance of a *well dug* and *well raked* garden.

"People may say what they please, yet we contend that good plowing is not only the first, but the most important part of the operations on the farm, and without it nothing else can be thoroughly well done for the crop. It would be well for our farmers if they would take lessons on plowing, at least so far as to enable them to draw straight lines (for these are rarely seen in the United States,) and stir and pulverize the soil well."

## SALT AS A FERTILIZER.

We have the satisfaction of announcing to our readers that the duty on a barrel of Onondaga salt has been reduced from 30 to 5 cents, or from 6 to 1 cent a bushel. We set this ball in motion some three years since, and have advocated the abatement of this most unequal tax on salt, both in and out of the Legislature, as many of our readers are well aware. The next step in the matter, according to our view of the subject, is to learn how to use salt in the most profitable way as a fertilizer of the soil. We read in the Bible of "salt which is not fit for the dung heap,"—thus clearly indicating that this article was used in an early day, to improve the quality of manure. The value of the "salt of the earth," not merely as a preservative of flesh, and a condiment promotive of the health of man, and his domestic animals, but as a

*fertilizer*, was as well known to the ancient Jews, as to the most intelligent nation now living. Chemical science, however, has thrown some new and valuable light on the properties of this compound mineral, and the best manner of feeding it to cultivated plants. Boussingault found that when salt was applied to a soil containing *lime*, the salt was decomposed. Its *chlorine* uniting with the lime to form the chloride of calcium, and the carbonic acid formerly combined with the lime, leaving it to unite with the soda in the salt, forming an efflorescence of the white carbonate of soda on the ground. This *alkali* thus derived from common salt is of great value in rendering silica (common sand) soluble, so that it can be taken up into the stems of plants. In case there is no *lime* in the soil, or its amount is very small, the chlorine in the salt will not be separated, and no *alkali* will be liberated. To obviate this difficulty, and at the same time form a general fertilizer of great value, in our last Report to the Legislature, we gave the following directions for using salt: "Take ten bushels newly slaked lime, i. e. ten before it is slaked, and mix it thoroughly with twenty bushels of loam or vegetable mold. Add to the heap five bushels of common salt and an equal amount of plaster of Paris; moisten till the mass is like damp earth."

The object of the loam or mold is to form a body in which the double decomposition of salt and carbonate of lime can be effected, as is known to occur in calcarious soils, when salt is sown upon the same. Perhaps ten bushels of loam, instead of twenty, would answer quite as well.

Salt being very soluble, and liable to waste, by running off into rivulets and brooks, it should be applied in small doses and often. On common limestone lands we should use only one bushel of lime to one of salt; but on most soils in this State two of lime and one of salt will be nearer the proper compound than the former.

A few bushels of salt added to a compost manure heap will be of essential service. It is also a valuable auxiliary when mixed with ashes, whether leached or unleached. Salt, however, is not equal in value to the urine of animals, for the simple reason that the latter contains the elements of ammonia, magnesia, and phosphates, as well as the chloride of sodium. We recommend and use gypsum with salt in order to gain the benefit of the *sulphur* in the gypsum, which plants need, and salt lacks. In a word, we aim to supply each crop with the precise things that nature uses in forming the same, so far as it is wanting in the soil where the crop grows. We have no idea of making bone earth (phosphate of lime) out of pure salt, nor plaster of Paris (sulphate of lime) out of iron, silica, alumina, or pure sand and clay. According to the analysis of LETELLIER, in 100 lbs. of ash of Indian corn there are 50 lbs. of phosphoric acid, 30 of potash and soda, and 18 of lime and magnesia.—*Genesee Farmer.*

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### WHITE AND YELLOW INDIAN CORN MEAL.

The following observations in relation to Indian corn meal, were communicated to the Journal of Commerce by a physician of the city of N. York.

Yellow corn and white corn are not the same in quality, although they are identical in kind, and may grow in the same field. The nutritive qualities of the yellow corn surpasses that of the white, and that is a good reason why the common sense of the people, or their ordinary experience, assigns to it a preference, independently of its mere looks.

The investigations of vegetable chemistry have revealed to us many important and interesting facts. By the aid of analysis, it has been ascertained that butter, in a pure state, is combined in all, or nearly all grapes, seeds, and grains. Out of 100 weight of yellow Indian corn meal, for instance, a good chemist can extract from eight to ten pounds of butter. Out of the same weight of weite Indian meal, six or eight per cent. of butter can be made, thus proving it to be in that proportion, so much the less nutritious. Of the unctuous quality of Indian meal, any one can satisfy himself, by attending to the usual process of cooking it. When it is boiled thick, as in making mush, if a crust adheres to the side of the vessel, on cooling, it is apt to peel off, of itself, owing to this fatty material in it.

It has furthermore been proved, that the butter obtained from the cream of milk; is not animal secretion, but that it previously existed in the pure and original state, in the hay or food of the cow; and a skillful chemist can make more butter out of a hundred weight of hay, than a cow can, as the cow must appropriate a considerable share of it for the uses and necessaries of her organization. Give a cow a hundred pounds of hay, and she will render back eight or ten pounds of butter; but an expert chemist can realize twelve or thirteen lbs. out of it. [?]

In the choice of the various articles of food, to suit our tastes on particular occasions—to correspond to the multiplied emergencies of life—the adaptations of the multifarious sorts and qualities of food, display infinite wisdom and goodness. In sickness, in health, in toil, when our means abound, and when they are scanty, we demand different kinds of food, and different varieties of the same kind, to satisfy our real and our imaginary wants. Of the grain stuffs, rice contains the least fatty material, and Indian corn the most, and ranging between these two extremes, we have wheat, oats, rye, barley, &c.—all different, and yet all of them capable of being applied to the respective conditions which are suited to them.

It is on account of the fatty nature of Indian corn meal, that it is such a strong kind of food, and that persons unaccustomed to it, cannot at first endure it. The nations which feed chiefly on rice, are not near so robust as those which use Indian corn, as the blacks of the south mostly do. Persons unaccustomed to this kind of food, therefore, will do best to commence with the white Indian meal, in preference to the yellow, as it is not so rich; and this preference of the white over the yellow, has already occurred in England, where the article is new.

There is only one more observation which I wish to make. As Indian corn meal contains so much fat in it, if kept too long, it is liable to become rancid, and is then more or less unfit for use. In the shipments made to the West Indies the meal is commonly kiln-dried, to obviate as much as possible this tendency to rancidity. For reasons just detailed, the white meal will keep rather better; and from its being lighter and milder, it is as much preferred for use in warm cli-

mates, as the yellow, for similar inducements, is in cold.

It has lately been stated that grain is subject to oxydation as well as metals; that the sugar which is contained in meal becomes an oxide of sugar by long exposure to the air. The true taste of meal is to be had, therefore, only when it is fresh-ground.—*Ed.*

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## PREPARING WOOL FOR MARKET.

This is an important matter to the wool grower, and one which is very often sadly neglected. In preference to writing any thing of our own on the subject, we copy the following directions from "Morrell's American Shepherd,"—a work that should be in the hands of every American, whether he keeps a sheep or not, for it is worth twice its cost as a treatise on an interesting branch of Natural History.

### ROLLING THE FLEECES.

After the shearer has performed his task, the fleeces must be carefully taken from the floor, and put upon the rolling table, the outside of it uppermost. The valuable loose locks about the shearer's stand must all be picked up, and the useless stuff from the legs, &c., put into a corner, bag, or basket. It should not be swept out of doors, as it possesses valuable properties for manure.

The roller then proceeds to spread out the fleece, which cannot be too carefully done, separates the ragged portions from the skirts and head, and then makes it as compact as possible by pushing from all sides towards the center. The loose wool is then thrown upon the fleece, which is followed by turning over the sides and ends so as to form an oblong stripe, say about two or three feet long, and one and a half wide, which is moved to the front edge of the table. He then commences to roll the long side of the strip, aided by a boy at the other end of it, who lay their arms flat from the elbow to press the wool as the rolling proceeds, till the stripe is reduced to six or nine inches in width, depending on the size of the fleece. The boy then mounts upon the table, and each commences rolling from the ends of the stripe till the parts meet, when the boy rolls his portion on top of his assistant's, firmly pressing it till the twine is passed round both ways and tied, which effectually secures the fleece, no matter how roughly handled. After it receives a slight pressure, it presents somewhat the form of a cheese.

There are other modes of putting up fleeces, performed without any aid; but the writer has yet to see that individual who alone can roll a fleece as firm and solid as it should be, at the same time giving it a symmetrical and attractive form. If it is loosely rolled, the quantity of canvass used for packing is necessarily much increased; and this item of extra expense is more than equivalent to the services of a lad as an assistant.

### ARRANGEMENT OF WOOL FOR SALE, &C.

The slovenly manner in which wool is rolled and afterwards prepared for exhibition to the buyer, deserves a passing remark.

The wool-grower should keep before him the motto of the shopman, "the goods tidily kept are half sold." This applies with equal propriety to everything saleable by the farmer, and to nothing with greater force than his wool. They are too prone to get along in this matter in a "rough and tumble" style, doing up the fleeces untidily, and then depositing them in dark and uninviting places for exhibition. If wool has been well cleansed, it will not be ashamed of too much light; if only half washed, a dark corner only aggravates its appearance. There is an art in disposing wool for sale, which enables the flock-master to put his best foot out, and yet be guiltless of artifice to deceive the buyer; on the contrary, increase his opportunity to judge accurately of everything appertaining to condition and quality.

The adoption of the following will carry out the writer's views and practice:—

First, against one, or all sides—if necessary—of the wool-loft, let four or five tiers of fleeces be placed upon top of each other, as nearly alike as to size as possible; the next pile, one tier of fleeces less, so on diminishing the succeeding piles one tier, till the last is reduced to a singly one. In this way, the fleeces represent piazza steps, or perhaps more properly, the ascending seats of an ampitheatre. It will readily be conceived, that if the fleeces have been neatly rolled and adjusted, the whole is not only attractive, but saves the buyer much time in overhauling it, which is unavoidable if disposed of in a bin, or piled in any other form. This constitutes one of those "inviting appearances" which the world delight to gaze on, and which the world are sometimes disposed to pay a *little* beyond the intrinsic value for the sake of possessing. Let the flock-master *honestly* tag his sheep and cleanse his fleeces, and put nothing *within them* but the "clean thing," and the inviting scene before the buyer cannot mislead, or deceive him afterwards.

This leads to an exposure of other "cheating practices" of wool-growers, alluded to by Mr. Samuel Lawrence, under the head of "washing." In a communication to the writer he states the following:—"The practice of inclosing in the fleece clippings, &c., is too common, and should be discouraged by manufacturers. I have known six ounces of this useless stuff taken from one fleece. There is another practice equally disgraceful—the use of five to twenty times as much twine as is necessary. A short time since I took sixty feet of large twine from one fleece."

No further comment is necessary, than to say, that any flock-master who will put tag or dung locks, clippings, &c., in the fleece, with a view to increase the weight, for such is the motive, is committing a gross fraud, and in every instance of discovery, his crime should be exposed to the public for reprobation.

In addition to excessive quantity of twine, it is not unusual for the size to be adapted almost as well for rope-traces, as tying of fleeces. It should be about half the size of a pipe's tail, as smooth as possible, otherwise, the fibres of flax, hemp, or cotton are intermingled with the wool; the carder cannot dislodge them—they receive the dye imperfectly, and consequently deface the surface of the cloth.

### SHEARING HOUSE AND APPENDAGES.

Flock-masters are subjected to many inconveniences for want of an appropriate place for shearing, with the necessary appendages of pounds, &c. The expense of a shearing-house is not large,

and will amply reimburse the expense in a few years, as it can be used for the reception of farm implements, &c., when the shearing is over, and wool removed.

The fence for the pounds should be constructed of posts and boards; two are required, and the one contiguous to the shearing-house need not be more than twenty feet square; the other may be much larger.

It is very important that the wool-loft should be well lighted. No matter how well the fleeces may have been cleansed, yet if there is a deficiency of light, they present a dingy aspect. One window of good size is all that is necessary at the south end, and two will be required at the opposite or north end, for the reason that from that quarter the light is milder, and gives the wool, if fine, a softer and more silky appearance. Wool sorters always give a "north light" the preference.

The trap door for suspending the sacks when packing, should be in a central part of the floor, which leads to the subject of

BALEING WOOL.

The article commonly used for baleing is termed by the merchant, *burlaps*, which varies in width from 35 to 40 inches; the latter is preferable. The quantity necessary for a sack is three yards. A truss hoop is used, around the rim of which the mouth of the sack is twisted, and is then placed on a square frame just large enough to permit the rim of the hoop to rest. The elevation should be sufficient to clear the sack from the lower floor, when suspended. Some half dozen fleeces are then thrown in for a layer, followed by a man who carefully adjusts and treads each succcessive layer, till full. Generally, there is too much taste in this matter, and consequently the wool is too loosely packed, and an extra quantity of canvass is made necessary. It will be well before the packing commences, to stuff the bottom corners of the sacks with wool clippings, and tie them, which afford handles for lifting the bales.

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WASH FOR STONE OR BRICK BUILDINGS.—Take one bushel of unslaked lime; half a gallon of vinegar; 8 lbs. tallow; 8 lbs. alum; 12 lbs. salt; 4 lbs. ground rice. Slake the lime with boiling water; then, while hot from slaking, add the other ingredients, (the tallow to be melted, and the rice flour to have been dissolved in boiling water,) and stir till fully incorporated; the longer it stands the better. Apply two coats with a whitewash brush.

Some of the public buildings at Washington have been washed with this composition, and experience has decided it to be the most voluable of any that has ever been employed for such a purpose.

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EYES VERSUS HEAD.—James II, when Duke of York, made a visit to Milton, out of curiosity. In the course of their conversation, the Duke suggested to the poet, that he thought his blindness was a judgment of heaven on him, because he had written against Charles I, his (the Duke's) father. The immortal poet replied, "if your Highness thinks that misfortunes are the indexes of the wrath of heaven, what must you think of your father's tragical end? I have only lost my eyes—he lost his head."

DEFINITIONS! Dog—a domestic animal, naturally attached to man. Sometimes he becomes so remarkably attached it is difficult to get him off.

Dose—enough of medicine for one time; say a pound of salts, half a peck of Brandreth's pills, a shovelfull of Sherman's lozenges, a bucket of castor oil, or a speech from a stump candidate.

A FISH STORY.—A wag went out a-fishing one day, and not meeting with the best luck, he went home with what he had caught, and a neighbor passing by, soon after, accosted him with,

"What luck to-day?"

"Oh!" answered he, "no great; I caught a hundred or two."

"A hundred or two!" replied the neighbor, with great surprise; "I'll bet you a dollar of that."

"Done," said the wag; wherewith he uncovered a pile near him, and a couple of fish lay there scarcely through with their death struggles, remarking, "there they are—I have won the wager."

"How so?" returned the neighbor, "there are only two."

"Well," was the answer, "that's just as I told you—a hundred, *or two*."

ASSES' MILK.—Dr. Walcot, better known as Peter Pindar, had, for some time a most violent cough, when his friend, Dr. Geageh, persisted in recommending asses' milk as a certain cure.—The bard, tired of his importunities, at length quieted him by sending the following epigram:

"And doctor, do you really think
That asses' milk I ought to drink?
'Twould quite remove my cough you say,
And drive my old complaints away.
It cured yourself, I grant it true;
But then, 'twas *mother's milk* to you."

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